

Buchbesprechungen

SWIFT, SUSAN M.: **Long-eared bats**. London: T. and A. D. Poyser Ltd. 1998, Hardcover, 182 pp., numerous black and white pictures and 13 colour plates. £ 24.95. ISBN 0-85661-108-5.

This monographic publication introduces the reader to the biology, ecology, behaviour, protection and research related with two European species of bats, the brown and grey long-eared bat, *Plecotus auritus* and *P. austriacus*. The author, who is research fellow at the University of Aberdeen, Scotland, draws on own investigations and on a wide range of international literature, not only concerning the above-mentioned species, but also on other bats, mainly representatives of the family Vespertilionidae.

After an introductory chapter the morphology is first described, followed by two chapters on food and its procurement. Reproduction, social organisation and behaviour, population biology and hibernation are presented and discussed in subsequent chapters. The author also deals extensively with the relationship between *Plecotus* species and the threats produced by an environment influenced and formed by man, such as timber treatment, street lamps and urbanisation in general. In three appendices the scientific and common English names of bat species and the care for stranded and injured bats, as well as a list of addresses of British institutions dealing with bat protection and research, are given. 17 pages of references and a detailed subject index conclude the book.

The text is written in a concise, down-to-the-point style; it supplies a wealth of information. Thirteen colour plates – some of them really outstanding photos – illustrate the two considered species and their biotopes. Mammalogists in general and especially chiropterologists will certainly thoroughly welcome this publication.

P. LANGER, Giessen

BERTA, A.; SUMICH, J. L.: **Marine Mammals: Evolutionary Biology**. San Diego: Academic Press 1999: Hardcover, 494 pp., numerous illustrations and tables. £ 39.95. ISBN 0-12-093225-3

This remarkable book gives an overview of the biology of marine mammals with emphasis on their evolution, anatomy, behaviour and their ecology. An aspect of this text worth mentioning is the phylogenetic approach, which supplies additional insights.

After a short introduction the first section deals with the evolutionary history of marine mammals. The authors deal with systematics and classification in general. The two authors, both working in California, initially give an account of the theoretical background and technical aspects of phylogenetic analysis, as well as dealing with questions on taxonomy and classification.

Pinnipeds, cetaceans, sirenians, sea otter and polar bear are considered in this book, but also extinct forms are briefly discussed: Fossils of sirenian as well as carnivoran relatives are dealt with, but the most remarkable form of all is an extinct aquatic sloth, *Thalassocnus natans*, from southern Peru. At the end of the section on the evolutionary history of marine Mammalia, a chapter dealing with the evolutionary biogeography follows. The chapters are structured according to similar principles: After short introductory remarks, the origin and evolution down to the family level are presented and discussed in detail. A summary as well as conclusions follow. All chapters are not only supplemented with an extensive list of references, but the use of these lists is always introduced by a very helpful “weighing” of the references in a special paragraph “Further Reading”, which structures the wealth of information stored in the listed papers.

The second main section deals with evolutionary biology, ecology and behaviour of marine mammals. Pinnipeds and cetaceans are covered thoroughly. A first chapter discusses the integument, and gives an account of the sensory and urinary systems. This chapter reviews older and newer data from the literature. The following chapter deals with the very different types of the musculoskeletal apparatus and, consequently, the very diverse types of locomotion. The subsequent chapter, is concerned with respiration, diving and “breath-hold physiology”, which is necessary for aquatic forms that de-

pend on air. In this chapter modern data from the physiological literature are presented. An account of sound production for communication, echolocation and prey capture follows; it concentrates on cetaceans. Different aspects of reproduction and population biology in marine mammals are discussed in the following three chapters. Finally, exploitation as well as aspects of conservation are presented. A detailed appendix makes the reader familiar with the classification of marine mammals. A glossary and a detailed index concludes this book.

The wealth of data made available in this publication cannot be discussed sufficiently and in detail in a review of only limited available space. Readers, who want a modern, extensive, clear, well-organised and illustrated introduction into the evolutionary biology of marine mammals, as well as those mammalogists who need a comprehensive source of information and reference to accompany them through their own studies of the fascinating world of marine Mammalia will be well served by the broad approach of ANNALISA BERTA and JAMES L. SUMICH. It is hoped that this book will stimulate other specialist to write similar texts on mammalian groups with emphasis on evolutionary biology!

P. LANGER, Giessen

BOINSKI, S., GARBER, P. A.: **On the Move – How and Why Animals Travel in Groups**. Chicago, London: University of Chicago Press 2000. Softcover or Hardcover, 824 pp., several figures. US\$ 35.–/95.– ISBN 0-226-06340-2 (paper) or 0-226-06340-2 (cloth)

There is nothing more boring than effusive patronisation in a book review, raising the impression that the reviewer was corrupted by the publisher. Here, the free of charge review copy alone makes a gratefully appreciated bribe. This book of 22 chapters and more than 800 pages including many diagrams written by many well-known and some famous authors gives an incredible mass of facts on many aspects concerning the social activities of a wide range of animals, including insects, carnivores, whales and humans, but focussing on simian primates. This book never becomes tedious, because facts are taken from a great variety of fields of knowledge relevant for modern evolutionary biology such as ecology, ethology, and socio-biology. Theoretical evaluations are always interspersed with short descriptions of field observations. The reader is guided through this book by a consequent and clearly structured introduction. Chapter titles outline exactly the content. Each chapter is a unit by itself, so that the reader can easily pick out selected chapters of interest. The registers are carefully composed and are a further immense help for orientation. The literature index of nearly 100 pages covers original publications referring to all major statements in the text. For further praise, see the reviews cited on the back cover. They all sound exaggerated but simply state the facts!

Obviously, this enumeration of merits has the danger of becoming tedious, and at this point something negative just has to be constructed to regain the attention of the reader. Why not criticise the title? “On the move – how and why animals travel in groups” is an understatement “par excellence”. Travelling in groups mostly means living in groups – and the authors consequently do not only argue about energetic costs and about who decides where to go in a group, but also expel on general mechanisms of social organisation, on the evolution of cognitive abilities and defence strategies. In the fifth section, comparative aspects of social organisation and travelling of non-primates and human African nomads round off the work.

Summarising all these facts, reading this book is of special interest for all readers interested in the non-molecular mechanisms behind biological evolution – even human evolution, and especially for those who until now are not interested in this field – because after reading this book, they may join the club.

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